

AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph beginning on page 8, line 25 and ending on page 9, line 7, as follows:

Timeslot 202a is a timeslot assigned to assist to improve the quality of the communication between transmitting apparatus 101 and receiving apparatus 102a by timeslot 201a, and the length of timeslot 202a is assumed to be shorter than that of timeslot 201a. In this embodiment, as an example, the length of timeslot 202a is one-third that of the main-timeslot. Timeslots 202b and 202c are similarly used respectively corresponding to timeslots ~~401b and 401c~~ 201b and 201c. Hereinafter each of these timeslots is referred to as a sub-timeslot.

Please amend the paragraph on page 10, beginning at line 7 and ending at line 17, as follows:

In receiving apparatus 102a, as illustrated in Fig.4B, reception processing section 1021 receives and demodulates the signal on main-timeslot ~~202a~~ 201a assigned to the apparatus 102a, and outputs the demodulated result of a soft decision value sequence {a'1, a'2, b'1, c'1, c'2, d'1, e'1, e'2, f'1, g'1, g'2, h'1...}. The demodulated result is subjected to channel decoding processing in channel decoding section 1022, and the decoded data and error detected result are output to reception success judging section 1025. Meanwhile the demodulated result is stored in storing section 1023.

Please amend the paragraph on page 16, beginning at line 1 and ending at line 6, as follows:

Transmitting/receiving apparatus 302 has at least reception processing section 3021, partial received quality estimating section 3022, transmission processing section

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3023, received quality information inserting section 3024, storing section 3025, combining section ~~3246~~ 3026 and channel decoding section 3027.

Please amend the paragraph beginning on page 18, line 17 and ending on page 19, line 4, as follows:

Partial received quality estimating section 3022 measures the average received signal strength of each one-third-burst interval with respect to each downlink received burst. The measured result is inserted into uplink transmission data in received quality information inserting section ~~3025~~ 3024, and is transmitted on uplink with the transmission data from transmission processing section 3023. In transmitting/receiving apparatus 301, reception processing section 3014 performs reception processing on the uplink transmission burst signal from transmitting/receiving apparatus 302, and from the processed data, received quality information extracting section 3015 extracts the average received signal strength information for each partial period in the burst received on downlink.

Please amend the paragraph beginning on page 23, line 22 and ending on page 24, line 5, as follows:

In transmitting apparatus 401, QAM transmitting section 4011 performs 16QAM on transmission data, and transmits the resultant on main-timeslot ~~203a~~ 201a, while the transmission data is stored in storing section 4012. It is generally known in the 16QAM system that a reception error rate of specific bits in the QAM symbol is poorer than the other bits. That is, in the case of the constellation as illustrated in FIG.7, bits c and d are relatively poor in reception error rate as compared to bits a and b because the distance between the signal points is short on average.

Please amend the paragraph on page 24, beginning at line 6 and ending at line 11, as follows:

Partial retransmission processing section 4013 extracts only bit data used as the bit c in arranging signal mapping on 16QAM among data already transmitted on the main-timeslot stored in storing section 4012 to provide to QAM transmitting section 4011, which performs QAM on the bit data to transmit on sub-timeslot ~~204a~~ 202a.

Please amend the paragraph on page 24, beginning at line 12 and ending at line 20, as follows:

In receiving apparatus 402, QAM signal receiving section 4021 receives and demodulates the QAM signal transmitted on main-timeslot ~~203a~~ 201a from transmitting apparatus 401, and stores soft decision values of the demodulated result in storing section 4022. Then, the section 4021 receives and demodulates the QAM signal transmitted on sub-timeslot ~~204e~~ 202a from transmitting apparatus 401, and outputs soft decision values of the demodulated result.

Please amend the paragraph beginning on page 34, line 21 and ending on page 35, line 7, as follows:

In addition, this embodiment has the constitution where as an example of using different modulation schemes on main-timeslots and sub-timeslots, 16QAM is used on main-timeslots and QPSK is used on sub-timeslots, but, is not limited to the above constitution. In contrast thereto, it may be possible to increase the modulation level in the modulation scheme on sub-timeslots so as to relatively increase the number of data items to be transmitted on sub-timeslots. For example, when the ratio of the main-timeslot length to the sub-timeslot length is maintained at 3:1, it may be possible to set

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the puncture rate in the puncture processing in channel decoding section ~~7011~~ 7022 to $3/5$, and to use QPSK on main-timeslots and 16QAM on sub-timeslots.

Please amend the paragraph on page 35, beginning at line 8 and ending at line 25, as follows:

Further, it may be possible to adaptively switch the puncture rate in the puncture processing in channel decoding section ~~7011~~ 7022 and the modulation schemes on main-timeslots and sub-timeslots corresponding to the quality on communication link. For example, it may be possible to set the modulation scheme on main-timeslots to 16QAM, and to corresponding to the quality on communication link, adaptively switch a combination of the puncture rate and modulation scheme on the sub-timeslot between three combinations, i.e., $(9/10, \text{QPSK})$, $(9/11, 16\text{QAM})$ and $(3/4, 64\text{QAM})$. In this case, the control method and procedure for switching the puncture rate and modulation scheme is not limited in particular. For example, it may be possible to insert a specific identification pilot signal into a timeslot, and to by identifying the signal, and recognize the puncture rate and modulation scheme, or such control information may be inserted into data to be transmitted on a main-timeslot.